





Summary of OceanObs'19 'Data Integration to User Products' Breakout

Jessica Hausman Jessica.Hausman@jpl.nasa.gov

Jet Propulsion Laboratory, California Institute of Technology

https://podaac.jpl.nasa.gov/

16 July 2020 ESIP Summer Meeting Connecting Informatics to Science Communities

Logistics

- Sched https://sched.co/cluB has all the links to QiQo Chat, slides for breakouts and presentations
- In Zoom add your affiliation with your name
- ESIP slack channel #informatics2science
 - https://esip-all.slack.com
- After the presentations everyone will go into a breakout room and report out one action before we adjourn. The breakouts are to discuss what was covered during the talks and come up with an action on how to bride informatics and the science communities. More details in the breakout slides linked in sched and QiQo.

Purpose

Informatics organizations, like ESIP, develop recommendations and improve the usage and understandability of new technologies and move forward various standards and conventions of metadata, APIs, ontologies, etc. This is done so that research and applications can discover, use, and integrate data into their workflows regardless of what their end needs are.

Scientists realize they need help with these things, but do not know where to turn or exactly what they need.

How do we bridge this gap?

Speakers

- Summary of OceanObs'19 'Data Integration to User Products' Breakout by Jessica Hausman (PO.DAAC/JPL)
- CEOS Analysis Ready Data for the Oceans by Ed Armstrong (PO.DAAC/JPL)
- Insights from Engaging with Scientists at Data Help Desks during Scientific Meetings by Megan Carter (ESIP)
- Ocean Hackweek by Stace Beaulieu (WHOI)

OceanObs'19

- Decadal meeting that's community driven to observe the oceans for better understanding of science and societal needs
- First time there was a data and informations theme
- 135 community white papers covering 10 themes http://www.oceanobs19.net/community-white-papers/

Data Integration With User Products

 Overview: Data products are best enabled by having native/original datasets with well crafted data management plans that create FAIR data and known data quality, so they lend themselves to to being exploited by open source software and APIs. Multiple informatics organizations exist that have best practices and recommendations for these various steps and should be leveraged by data producers of ocean observations.

Data Integration With User Products

Recommendations

- Funding agencies of ocean observing systems need to align funding to meet the demands of data management, long-term stewardship, and training by participation in e.g., IODE, ESIP, E2SIP, CODATA, RDA.
- To qualify user products, a quantified measurement uncertainty should be added to each measurement result entered into ocean observation systems.
- Data providers should strive to use web services with well described and open APIs to distribute and make their data accessible to human and machine consumers to enable data products downstream

OceanObs Research Coordination Network **Annual Meeting**

- Before Ocean Science Meeting, 16 Feb 2020
- Data Management, Products and Interoperability **Breakout**
 - Guidance document (checklist) for funding agencies
 - Define core competencies in ocean data science that are necessary for graduate training.
 - Build a bridge between technology and science